### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002883 Address: 333 Burma Road **Date Inspected:** 04-Jun-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 1730 **Project Name:** SAS Superstructure **OSM Departure Time:** 800 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Xu Le Feng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 Tower **Bridge No: Component:** 

## **Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

#### New Tower Shop Bay 1:

The QA Inspector randomly observed ZPMC Non-Destructive Technician Wang Wei, utilizing the Magnetic Particle Testing (MT) method to examine the root pass in Tower Skin Plate C Weld Joint (WJ) SSD1-SA179D/E-14A, 12 and 25A. There appeared to be no indications and ZPMC accepted the root pass in the above WJ's.

The QA Inspector randomly observed ZPMC welder Chen Hongxia ID Number 040460, utilizing the Submerged Arc Welding (SAW) Process in the 1G Position (Flat Groove) with ZPMC Weld Procedure Specification (WPS) WPS-B-T-2221-B-U3c-S, to weld the root pass in WJ SSD1-SA179D/E-13A(CJP), 8(PJP) and 24A(CJP) on Tower Skin Plate C Sub-Assembly SA179(S). The QA Inspector randomly observed ZPMC CWI Xu Le Feng monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 538 amps, 29.4 volts with a travel speed of 524 millimeters (mm) per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Yun Chuan Jin ID Number 0503060, utilizing the SAW Process in the 1G Position (Flat Groove) with ZPMC WPS WPS-B-T-2221-B-U3c-S, to weld the fill pass in WJ SSD1-SA179D/E-14A(CJP), 12(PJP) and 25A(CJP) Tower Skin Plate C Sub-Assembly SA179(S). The QA

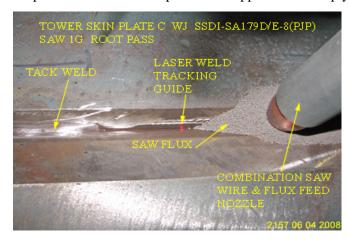
# WELDING INSPECTION REPORT

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Inspector randomly observed ZPMC CWI Xu Le Feng monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 673 amps, 33.4 volts with a travel speed of 560 mm per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC Non-Destructive Technician Wang Wei, utilizing the Magnetic Particle Testing (MT) method to examine the root pass in Tower Skin Plate C Weld Joint (WJ) SSD1-SA179D/E-13A, 8 and 24A. There appeared to be no indications and ZPMC accepted the root pass in the above WJ's.

The QA Inspector randomly observed ZPMC welder Chen Hongxia ID Number 040460, utilizing the SAW Process in the 1G Position (Flat Groove) with ZPMC WPS WPS-B-T-2221-B-U3c-S, to weld the fill pass in WJ SSD1-SA179D/E-13A(CJP), 8(PJP) and 24A(CJP) on Tower Skin Plate C Sub-Assembly SA179(S). The QA Inspector randomly observed ZPMC CWI Xu Le Feng monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 660 amps, 33 volts with a travel speed of 595 mm per minute. The weld parameters appeared to comply with contract requirements.





## **Summary of Conversations:**

There were no relevant conversations.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Franco, Charlie	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer